

CLAIMS

What is claimed is:

- 1 1. A method for detecting modifications to risk assessment scanning caused by
2 an intermediate device, comprising:
 - 3 (a) initiating a risk assessment scan on a target from a remote source utilizing a
4 network;
 - 5 (b) determining whether the risk assessment scan involves an intermediate
6 device coupled between the target and the remote source;
 - 7 (c) receiving results of the risk assessment scan from the target utilizing the
8 network; and
 - 9 (d) notifying an administrator if it is determined that the risk assessment scan
10 involves the intermediate device.
- 1 2. The method as recited in claim 1, wherein the intermediate device includes a
2 router.
- 1 3. The method as recited in claim 1, wherein the intermediate device includes a
2 proxy server.
- 1 3. The method as recited in claim 1, wherein a plurality of procedures are
2 utilized to determine whether the risk assessment scan involves the
3 intermediate device.
- 1 4. The method as recited in claim 3, wherein at least one of the procedures
2 includes determining a port list associated with the risk assessment scan.

- 1 5. The method as recited in claim 4, wherein the at least one of the procedures
2 further includes determining whether a value of a flag is different for
3 communication attempts using at least two ports on the port list.
- 1 6. The method as recited in claim 5, wherein the flag includes an ip_ttl flag.
- 1 7. The method as recited in claim 5, wherein the flag includes a tcp_win flag.
- 1 8. The method as recited in claim 5, wherein the communications include
2 connection attempts between the remote source and the target utilizing the
3 network.
- 1 9. The method as recited in claim 5, wherein the at least one of the procedures
2 further includes indicating that the risk assessment scan involves the
3 intermediate device if the value of the flag is different for the communication
4 attempts using the at least two ports on the port list.
- 1 10. The method as recited in claim 3, wherein at least one of the procedures
2 includes transmitting a first request for content to the target utilizing the
3 network, and transmitting a second request for a cached version of the
4 content to the target utilizing the network.
- 1 11. The method as recited in claim 10, wherein the cached content is requested
2 from the target utilizing a via tag.
- 1 12. The method as recited in claim 10, wherein the at least one of the procedures
2 further includes analyzing responses to the first and second requests.
- 1 13. The method as recited in claim 12, wherein the at least one of the procedures
2 further includes indicating that the risk assessment scan involves the
3 intermediate device based on the analysis.

1 14. The method as recited in claim 13, wherein the at least one of the procedures
2 further includes indicating that the risk assessment scan involves the
3 intermediate device if the responses to the requests are different.

1 15. The method as recited in claim 3, wherein at least one of the procedures
2 includes transmitting a request without specifying a host header value.

1 16. The method as recited in claim 15, wherein the at least one of the procedures
2 further includes identifying an error message in response to the request.

1 17. The method as recited in claim 16, wherein the at least one of the procedures
2 includes indicating that the risk assessment scan involves the intermediate
3 device if the response includes the error message.

1 18. A computer program product for detecting modifications to risk assessment
2 scanning caused by an intermediate device, comprising:
3 (a) computer code for initiating a risk assessment scan on a target from a remote
4 source utilizing a network;
5 (b) computer code for determining whether the risk assessment scan involves an
6 intermediate device coupled between the target and the remote source;
7 (c) computer code for receiving results of the risk assessment scan from the
8 target utilizing the network; and
9 (d) computer code for notifying an administrator if it is determined that the risk
10 assessment scan involves the intermediate device.

1 19. The computer program product as recited in claim 18, wherein the
2 intermediate device includes a router.

1 20. The computer program product as recited in claim 18, wherein the
2 intermediate device includes a proxy server.

- 1 21. The computer program product as recited in claim 18, wherein a plurality of
2 procedures are utilized to determine whether the risk assessment scan
3 involves the intermediate device.
- 1 22. The computer program product as recited in claim 21, wherein at least one of
2 the procedures includes determining a port list associated with the risk
3 assessment scan.
- 1 23. The computer program product as recited in claim 22, wherein the at least
2 one of the procedures further includes determining whether a value of a flag
3 is different for communication attempts using at least two ports on the port
4 list.
- 1 24. The computer program product as recited in claim 23, wherein the flag
2 includes an ip_ttl flag.
- 1 25. The computer program product as recited in claim 23, wherein the flag
2 includes a tcp_win flag.
- 1 26. The computer program product as recited in claim 23, wherein the
2 communications include connection attempts between the remote source and
3 the target utilizing the network.
- 1 27. The computer program product as recited in claim 23, wherein the at least
2 one of the procedures further includes indicating that the risk assessment
3 scan involves the intermediate device if the value of the flag is different for
4 the communication attempts using the at least two ports on the port list.
- 1 28. The computer program product as recited in claim 21, wherein at least one of
2 the procedures includes transmitting a first request for content to the target

3 utilizing the network, and transmitting a second request for a cached version
4 of the content to the target utilizing the network.

1 29. The computer program product as recited in claim 28, wherein the cached
2 content is requested from the target utilizing a via tag.

1 30. The computer program product as recited in claim 28, wherein the at least
2 one of the procedures further includes analyzing responses to the first and
3 second requests.

1 31. The computer program product as recited in claim 30, wherein the at least
2 one of the procedures further includes indicating that the risk assessment
3 scan involves the intermediate device based on the analysis.

1 32. The computer program product as recited in claim 31, wherein the at least
2 one of the procedures further includes indicating that the risk assessment
3 scan involves the intermediate device if the responses to the requests are
4 different.

1 33. The computer program product as recited in claim 21, wherein at least one of
2 the procedures includes transmitting a request without specifying a host
3 header value.

1 34. The computer program product as recited in claim 33, wherein the at least
2 one of the procedures further includes identifying an error message in
3 response to the request.

1 35. The computer program product as recited in claim 34, wherein the at least
2 one of the procedures includes indicating that the risk assessment scan
3 involves the intermediate device if the response includes the error message.

- 1 36. A system for detecting modifications to risk assessment scanning caused by
2 an intermediate device, comprising:
3 (a) logic for initiating a risk assessment scan on a target from a remote source
4 utilizing a network;
5 (b) logic for determining whether the risk assessment scan involves an
6 intermediate device coupled between the target and the remote source;
7 (c) logic for receiving results of the risk assessment scan from the target utilizing
8 the network; and
9 (d) logic for notifying an administrator if it is determined that the risk
10 assessment scan involves the intermediate device.

- 1 37. A method for detecting modifications to risk assessment scanning caused by
2 a proxy server, comprising:
3 (a) initiating a risk assessment scan on a target from a remote source utilizing a
4 network;
5 (b) executing a plurality of procedures to determining whether the risk
6 assessment scan involves a proxy server coupled between the target and the
7 remote source;
8 (c) said procedures utilizing a plurality of parameters selected from the group
9 consisting of an ip_ttl flag, a tcp_win flag, a via tag, and a host header value;
10 (d) receiving results of the risk assessment scan from the target utilizing the
11 network;
12 (e) flagging the results of the risk assessment scan if at least one of the
13 procedures indicates that the risk assessment scan involves a proxy server
14 coupled between the target and the remote source; and
15 (f) notifying an administrator if the results of the risk assessment scan are
16 flagged.

- 1 38. A computer program product for detecting modifications to risk assessment
2 scanning caused by a proxy server, comprising:

- 3 (a) computer code for initiating a risk assessment scan on a target from a remote
- 4 source utilizing a network;
- 5 (b) computer code for executing a plurality of procedures to determining
- 6 whether the risk assessment scan involves a proxy server coupled between
- 7 the target and the remote source;
- 8 (c) said procedures utilizing a plurality of parameters selected from the group
- 9 consisting of an ip_ttl flag, a tcp_win flag, a via tag, and a host header value;
- 10 (d) computer code for receiving results of the risk assessment scan from the
- 11 target utilizing the network;
- 12 (e) computer code for flagging the results of the risk assessment scan if at least
- 13 one of the procedures indicates that the risk assessment scan involves a proxy
- 14 server coupled between the target and the remote source;
- 15 (f) computer code for notifying an administrator if the results of the risk
- 16 assessment scan are flagged.

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